

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL DUE TO UPGRADES OF PEDESTRIAN FACILITIES AT THE INTERSECTION OF US 1 (WASHINGTON BLVD) AND TROY HILL DRIVE IN HOWARD COUNTY. INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS AND COUNTDOWN PEDESTRIAN SIGNAL HEADS IS PROPOSED ALONG THE WEST LEG OF THE INTERSECTION. ADDITIONALLY, MODIFICATION OF THE EXISTING PEDESTRIAN RAMPS AND CONSTRUCTION OF CURBED ISLANDS IS PROPOSED TO MEET CURRENT ADA REQUIREMENTS.

US 1 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA 4 PHASE, FULL TRAFFIC ACTUATED MODE.

CONTROLLER REQUIREMENTS

EXISTING CABINET AND CONTROLLER WILL BE UTILIZED. SHA FORCES WILL INSTALL ONE (1) 2-WIRE CENTRAL CONTROL UNIT.

SHA FORCES SHALL PERFORM ALL INTERNAL CABINET WIRING.

APS OPERATION

FOR TROY HILL DRIVE

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS TROY HILL AT WASHINGTON, WAIT"
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

THE CONTRACTOR SHALL CONTACT ED RODENHIZER AT THE SIGNAL SHOP 410-787-7650 TO DELIVER APS EQUIPMENT FOR TESTING.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: 301-624-8140

Ms. Andrea Abend
District Utility Engineer
Phone: 301-624-8115

Ms. Sue Palmer
Assistant District Engineer - Maintenance
Phone: 301-624-8108

Mr. John Huchrowski
Assistant District Engineer - Construction
Phone: 301-624-8201

THE CONTACT PERSONS FOR OFFICE OF TRAFFIC AND SAFETY ARE AS FOLLOWS:

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

The Power Company Representative is:
Baltimore Gas & Electric Company
7317 Parkway Drive South
Hanover, MD 21076
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
973023	77 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGNS:
		6 EACH: W11-2 (36 IN. x 36 IN.) POLE MOUNT
		2 EACH: W13-411 (36 IN. x 24 IN.) POLE MOUNT "ACROSS RAMP"
		2 EACH: W16-7D (21 IN. x 15 IN.) POLE MOUNT "SYM: 45° ARROW, RIGHT"
		2 EACH: W16-7D (21 IN. x 15 IN.) POLE MOUNT "SYM: 45° ARROW, LEFT"
		2 EACH: R10-311 (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS TROY HILL DRIVE"

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CONTRACT NO: C-0285-02

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
203030	2 EA	TEST PIT EXCAVATION
585621	300 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	20 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	32 LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
800000	2 EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	2 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND SIGN
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
801004	1 CY	CONCRETE FOR SIGNAL FOUNDATION
801106	64 LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
801607	75 SF	INSTALL SHEET ALUMINUM SIGN
802145	1 EA	ADJUST EXISTING HANDHOLE
802501	120 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805115	85 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
805135	25 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805160	10 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
810555	2 EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
811001	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
812002	32 LF	WOOD SIGN SUPPORTS 6 INCH X 6 INCH
818004	2 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
861105	310 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	330 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
862102	65 LF	SAW CUT FOR SIGNAL LOOP DETECTOR

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

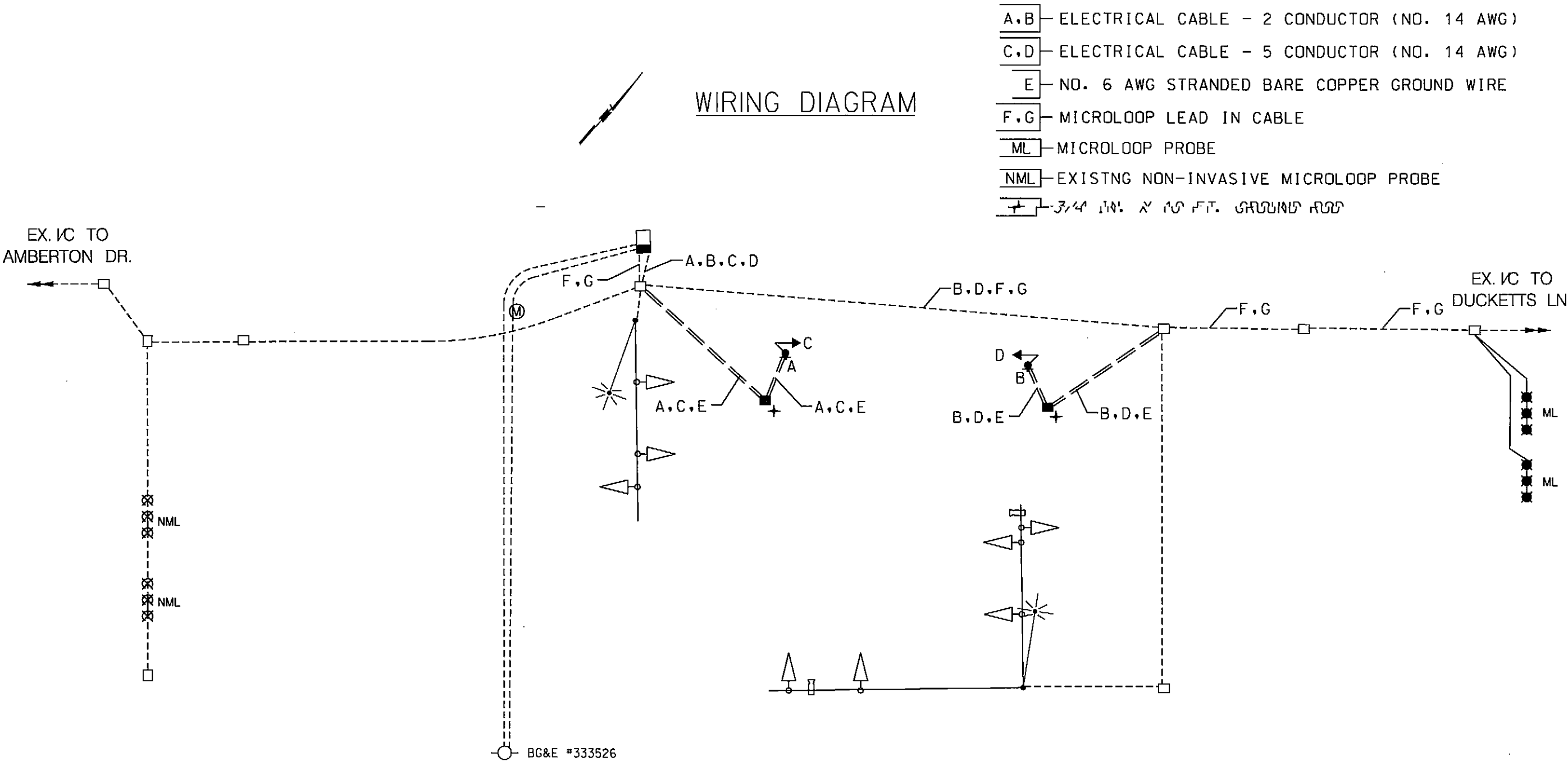
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART

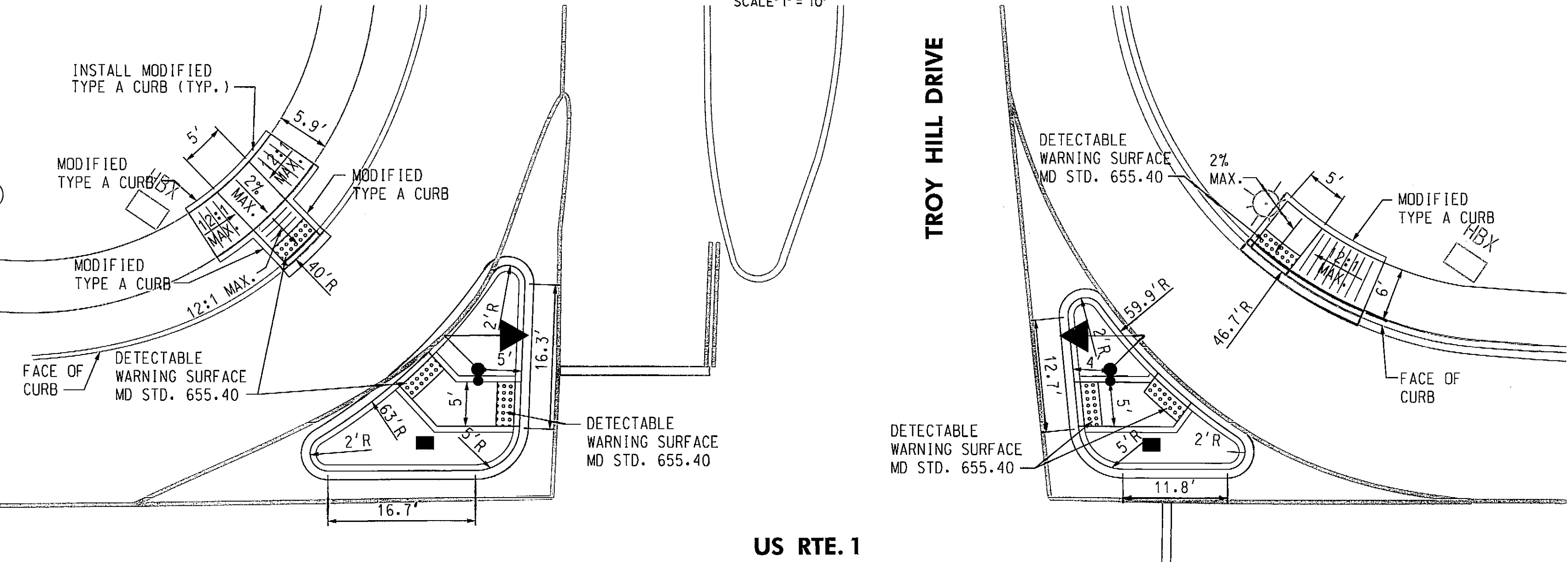
	1	2	3	4	5	6	7	8	9	10	
PHASE 1 + 6	G	G	G	R	R	R	R	R	R	DW	DW
1 CHANGE	G	G	G	R	R	R	R	R	R	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	WK	WK
PED CLEARANCE	G	G	G	G	G	G	R	R	R	FL/DW	FL/DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	G	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



SIGNAL AND RAMP DETAILS

SCALE: 1" = 10'



US RTE. 1

TROY HILL DRIVE

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 CORRIDOR REVITALIZATION
US 1 AT TROY HILL DRIVE

GENERAL INFORMATION SHEET

SCALE: N.T.S. ADVERTISED DATE: AUG. 2011 CONTRACT NO.: C-0285-02

DESIGNED BY: P.WESTCOTT COUNTY: HOWARD
DRAWN BY: P.WESTCOTT LOGMILE: 13000108.24
CHECKED BY: J.WANG TMS NO.: K812
F.A.P. NO.: TOD NO.:

TS NO. 4427A DRAWING: SG-06 OF 08 SHEET NO. 22 OF 24



RJM ENGINEERING, INC.
CONSULTING ENGINEERS
ELLICOTT CITY, MARYLAND

PLOTTED: Tuesday, August 02, 2011 AT 09:29 AM
FILE: P:\SHA\US 1 at Troy Hill Dr\2011-07\PSG-N002_US1-TroyHill.dgn